The 6Ds of Disruption

The 6 Ds of Disruption help you to understand the current state of technology and how it will develop in the future. Using the digital camera as an example, Pascal explains the steps in which disruption occurs and the consequences it has for an existing product.

Learning contents

- **Understanding disruption**
- **The typical development of disruptive technologies**

Peter Diamandis, the co-founder of Singularity University,

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developed a model called 'The 6 D's of Disruption'.

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It's a really nice model to explain how this world of exponential disruption works.

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Let me explain this to you using the Kodak example of their first digital camera.

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The first 'D' says: you take something from analog and you digitize it.

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We talked about this already.

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So you take something which is film, an analog product, mostly chemical,

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and you turn it into a digital product.

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Once it turns into a digital product it moves on an exponential curve,

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but we already learned that in the beginning

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these curves have a phase which we call 'deception',

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where the technology is just not good enough.

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The first camera we had,

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the first digital camera Kodak developed had 0.01 megapixels.

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Black and white, took 23 seconds to take the picture,

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and the way it recorded it was on a cassette tape.

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It was obviously a pretty bad product, it was deceptively bad.

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But it moves on an exponential curve,

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so the next iteration of that product had 0.02 megapixels.

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Still pretty bad, and then it went 0.04 and so on and so on.

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So for a really long period of time the product wasn't that great.

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Then we move into the third 'D' of disruption.

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And the third 'D' of disruption is when it becomes disruptive,

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which means the lines are crossing.

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In the case of the camera it was when we had a two megapixel camera.

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I very distinctly remember buying a Canon Digital Elph, or an Ixus if you are from Europe.

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And that was a 499 dollar camera, two megapixels,

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good enough to do a nine by thirteen centimeter print and it changed everything.

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Because now I am not buying film anymore, I am not processing the film anymore,

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I am not printing anything anymore.

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And then we get into the forth and the fifth and the sixth 'D'.

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The forth 'D' is dematerialization.

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Technology has a tendency to disappear.

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What was a 499 dollar camera is about dollars worth of hardware,

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in your phone today and all the rest is software.

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That leads to demonetization.

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So we're sucking money out of the system:

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You're not buying a camera anymore, you're not buying film anymore,

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you're not processing the film, all that money goes away.

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But the good news is: it also leads to a democratization.

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Which means that now we have three billion pictures

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which get uploaded to the internet every single day.

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So there's massive amounts of people using their cellphones.

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I mean, just imagine when you go to a rock concert today,

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back in the day we used our lighters to -

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in the love song section, to celebrate.

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And today we hold up our smartphones.

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You go to University: everybody has a damn laptop.

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'The 6 D's of Disruption' is a really beautiful model to explain to us:

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Where is a technology today and what is the most likely shift it will do?

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And the question you can ask yourself is:

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Where is your technology and your company today?